

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IFW

Applicant: Scott Freeberg
Title: CROSS-CHECKING OF TRANSTHORACIC IMPEDANCE AND ACCELERATION SIGNALS
Docket No.: 279.652US1
Filed: October 29, 2003
Examiner: Unknown
Serial No.: 10/696,729
Due Date: N/A
Group Art Unit: 3762


MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

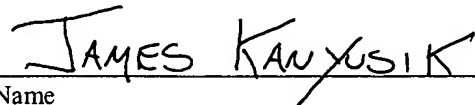
- ☒ A return postcard.
- ☒ A Communication Concerning Related Applications (2 pgs.).
- ☒ An Information Disclosure Statement (2 pgs.), Form 1449 (2 pgs.), and copies of 12 cited documents.

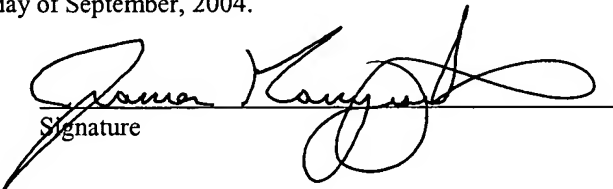
If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
Customer Number 21186

By: 
Atty: David W. Black
Reg. No. 42,331

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30th day of September, 2004.


Name


Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
(GENERAL)



S/N 10/696,729

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Scott Freeberg	Examiner:	Unknown
Serial No.:	10/696,729	Group Art Unit:	3762
Filed:	October 29, 2003	Docket:	279.652US1
Title:	CROSS-CHECKING OF TRANSTHORACIC IMPEDANCE AND ACCELERATION SIGNALS		

INFORMATION DISCLOSURE STATEMENT

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicant respectfully requests that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicant requests that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicant with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

INFORMATION DISCLOSURE STATEMENT

Serial No :10/696,729

Filing Date: October 29, 2003

Title: CROSS-CHECKING OF TRANSTHORACIC IMPEDANCE AND ACCELERATION SIGNALS

Page 2

Dkt: 279.652US1

The present application is a U.S. national patent application filed after June 30, 2003. Thus, Applicant believes that the U.S. Patent & Trademark Office has waived the requirement under 37 C.F.R. 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication. The waiver is provided in a pre-OG notice from the U.S. Patent & Trademark Office entitled "Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003" and dated July 11, 2003. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).


The Examiner is invited to contact the Applicant's Representative at the below-listed Telephone number if there are any questions regarding this communication.

Respectfully submitted,

SCOTT FREEBERG

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6911

Date September 30, 2004 By 
David W. Black
Reg. No. 42,331

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30TH day of September, 2004.

JAMES KANYUSIK
Name


Signature

S/N 10/696,729

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Scott Freeberg

Examiner: Unknown

Serial No.: 10/696,729

Group Art Unit: 3762

Filed: October 29, 2003

Docket: 279.652US1

Title: CROSS-CHECKING OF TRANSTHORACIC IMPEDANCE AND
ACCELERATION SIGNALS



COMMUNICATION CONCERNING RELATED APPLICATIONS

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicant would like to bring to the Examiner's attention the following related applications in the above-identified patent application:

<u>Serial/Patent No.</u>	<u>Filing Date</u>	<u>Attorney Docket</u>	<u>Title</u>
09/032,731 6,076,015	February 27, 1998	279.078US1	RATE ADAPTIVE CARDIAC RHYTHM MANAGEMENT DEVICE USING TRANSTHORACIC IMPEDANCE
09/316,690 6,161,042	May 21, 1999	279.078US2	RATE ADAPTIVE CARDIAC RHYTHM MANAGEMENT DEVICE USING TRANSTHORACIC IMPEDANCE
09/492,912 6,463,326	January 20, 2000	279.078US3	RATE ADAPTIVE CARDIAC RHYTHM MANAGEMENT DEVICE USING TRANSTHORACIC IMPEDANCE
10/735,598	December 12, 2003	279.441US1	AUTOMATICALLY CONFIGURABLE MINUTE VENTILATION SENSOR
10/612,388	July 2, 2003	279.582US1	CARDIAC CYCLE SYNCHRONIZED SAMPLING OF IMPEDANCE SIGNAL

COMMUNICATION CONCERNING RELATED APPLICATIONS

Serial Number: 10/696,729

Filing Date: October 29, 2003

Title: CROSS-CHECKING OF TRANSTHORACIC IMPEDANCE AND ACCELERATION SIGNALS

Page 2

Dkt: 279.652US1

10/268,023 October 8, 279.078US4
2003/0105499 2002
A1


RATE ADAPTIVE CARDIAC RHYTHM
MANAGEMENT DEVICE USING
TRANSTHORACIC IMPEDANCE

Respectfully submitted,

SCOTT FREEBERG

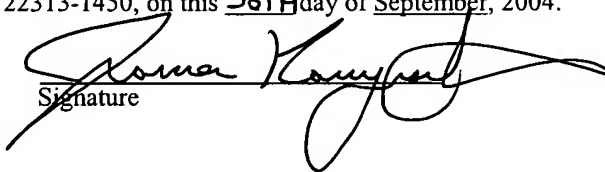
By Applicant's Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6911

Date September 30, 2004 By 
David W. Black
Reg. No. 42,331

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30TH day of September, 2004.

JAMES KAUYUSIK
Name


Signature

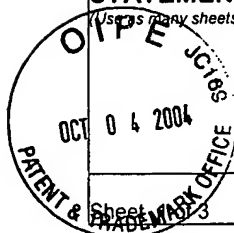
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number 10/696,729**Filing Date** October 29, 2003**First Named Inventor** Freeberg, Scott**Group Art Unit** 3762**Examiner Name** Unknown**Attorney Docket No:** 279.652US1**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	US-2003/0105499 A1	06/05/2003	Hartley, J. W., et al.	607	17	10/08/2002
	US-3,896,817	07/29/1975	Hursen, Thomas F., et al.	128	419R	08/04/1972
	US-4,596,251	06/24/1986	Plicchi, G., et al.	128	419 PG	10/10/1984
	US-4,686,987	08/18/1987	Salo, Rodney W., et al.	128	419 PG	03/29/1982
	US-4,702,253	10/27/1987	Nappholz, T. A., et al.	128	419 PG	10/15/1985
	US-4,722,351	02/02/1988	Phillipps, P. G., et al.	128	696	01/31/1986
	US-4,781,201	11/01/1988	Wright, J. C., et al.	128	671	07/22/1996
	US-4,827,935	05/09/1989	Geddes, , et al.	128	419	04/24/1986
	US-4,830,008	05/16/1989	Meer,	128	421	02/16/1988
	US-4,858,611	08/22/1989	Elliott, C. D.	128	419 P	06/03/1987
	US-4,901,725	02/20/1990	Nappholz, T. A., et al.	128	419	01/29/1988
	US-4,966,146	10/30/1990	Webb, S. C., et al.	128	419 PG	01/11/1989
	US-5,027,813	07/02/1991	Pederson, B. D., et al.	128	419	03/05/1990
	US-5,063,927	11/12/1991	Webb, S. C., et al.	128	419 PG	02/16/1989
	US-5,074,303	12/24/1991	Hauck, J. A.	128	419	03/08/1990
	US-5,085,215	02/04/1992	Nappholz, T. A., et al.	128	419 PG	03/20/1990
	US-5,137,019	08/11/1992	Pederson, B. D., et al.	128	419	03/01/1991
	US-5,156,147	10/20/1992	Warren, J. A., et al.	128	419.0 PG	02/05/1991
	US-5,190,035	03/02/1993	Salo, R. W., et al.	128	419	04/17/1986
	US-5,197,467	03/30/1993	Steinhaus, B. M., et al.	128	419 PG	06/22/1992
	US-5,199,428	04/06/1993	Obel, Israel W., et al.	128	419 C	03/22/1991
	US-5,201,808	04/13/1993	Steinhaus, B. M., et al.	128	419 PG	02/10/1992
	US-5,235,976	08/17/1993	Spinelli, Julio C.	607	25	12/13/1991
	US-5,249,572	10/05/1993	Bonnet, J-L.	607	20	12/23/1991
	US-5,271,395	12/21/1993	Wahlstrand, John D., et al.	607	9	04/17/1992
	US-5,273,034	12/28/1993	Nilsson, K.	607	18	04/22/1992
	US-5,284,136	02/08/1994	Hauck, John A., et al.	607	24	05/13/1991
	US-5,300,094	04/05/1994	Kallok, et al.	607	042	03/19/1992
	US-5,303,702	04/19/1994	Bonnet, J-L, et al.	607	20	12/23/1991
	US-5,318,597	06/07/1994	Hauck, J. A., et al.	607	20	03/15/1993

EXAMINER**DATE CONSIDERED**

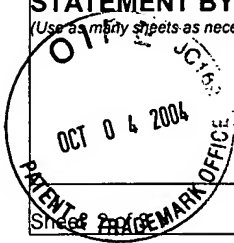
Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/696,729
Filing Date	October 29, 2003
First Named Inventor	Freeberg, Scott
Group Art Unit	3762
Examiner Name	Unknown
Attorney Docket No: 279.652US1	

US-5,379,776	01/10/1995	Murphy, A. J., et al.	128	705	12/01/1993
US-5,391,190	02/21/1995	Pederson, B. D., et al.	607	23	04/07/1992
US-5,423,870	06/13/1995	Olive, , et al.	607	18	11/22/1993
US-5,441,524	08/15/1995	Rueter, , et al.	607	18	08/30/1993
US-5,507,785	04/16/1996	Deno, Don C.	607	24	12/21/1994
US-5,524,632	06/11/1996	Stein, , et al.	128	733	05/19/1995
US-5,540,733	07/30/1996	Testerman, , et al.	607	42	09/21/1994
US-5,562,711	10/08/1996	Yerich, Charles G., et al.	607	17	11/30/1994
US-5,562,712	10/08/1996	Steinhaus, , et al.	607	20	11/25/1994
US-5,626,622	05/06/1997	Cooper, D.	607	18	09/21/1994
US-5,792,208	08/19/1998	Gray,	607	36	06/30/1997
US-5,800,470	09/01/1998	Stein, Paul M., et al.	607	20	03/11/1996
US-5,817,135	10/06/1998	Cooper, D. , et al.	607	17	05/02/1997
US-5,817,136	10/06/1998	Nappholz, T. A., et al.	607	17	05/02/1997
US-5,824,020	10/20/1998	Cooper, D.	607	17	05/02/1997
US-5,824,029	10/20/1998	Weijand, K. J., et al.	607	122	04/28/1994
US-5,836,976	11/17/1998	Min, , et al.	607	6	04/30/1997
US-6,006,134	12/21/1999	Hill, Michael R., et al.	607	9	04/30/1998
US-6,044,294	03/28/2000	Mortazavi, S. , et al.	600	547	12/13/1996
US-6,076,015	06/13/2000	Hartley, Jesse W., et al.	607	20	02/27/1998
US-6,161,042	12/12/2000	Hartley, J. W., et al.	607	20	05/21/1999
US-6,415,183	07/02/2002	Scheiner, A. , et al.	607	42	12/09/1999
US-6,459,929	10/01/2002	Hopper, Donald , et al.	600	513	04/12/2000
US-6,463,326	10/08/2002	Hartley, J. W., et al.	607	20	01/20/2000

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²
	DE-2805482	03/05/1987	Hofmann, G. H.	A61B	5/04	
	EP-0003567A1 (w/ English Abstract)	08/22/1979	Hofmann, G. H.	A61B	5/04	
	EP-0940155A2	09/08/1999	Bougeois, I., et al.	A61N	1/36	
	EP-447024A2	09/18/1991	Hauck, J. A.	A61N	1/365	
	EP-702977A2	03/27/1996	Testerman, R. L.	A61N	1/36	
	EP-765632A2	04/02/1997	Addiss, R. R.	A61B	5/08	
	FR-2305168	10/22/1976	Milleret, M.	A61H	31/00	
	WO-9406512A1	03/31/1994	Schaldach, M.	A61N	1/365	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/696,729
Filing Date	October 29, 2003
First Named Inventor	Freeberg, Scott
Group Art Unit	3762
Examiner Name	Unknown

Attorney Docket No: 279.652US1

Sheet 3 of 3

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		FREEBERG, S. , "AUTOMATICALLY CONFIGURABLE MINUTE VENTILATION SENSOR", <u>US Patent Application Ser. No. 10/735,598, filed December 12, 2003 (279.441US1), 35 Pages</u>	
		HAUCK, JOHN A., "A Minute Ventilation Sensor Derived from Intra-thoracic Electric Impedance as a Cardiac Pacemaker Rate Modulator", <u>University of Minnesota Master Thesis, (June 1993), Pages 80-86 & 97</u>	
		JACKSON, LELAND B., "Chapter 11 / Quantization Effects", <u>Digital Filters and Signal Processing, 2d Edition, Kluwer Academic Publishers, (1989), Pages 297-340</u>	
		KIM, J. , et al., "CARDIAC CYCLE SYNCHRONIZED SAMPLING OF IMPEDANCE SIGNAL", <u>US Application Ser. No. 10/612,388, filed July 2, 2003 (279.582US1), 28 Pages</u>	

EXAMINER**DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.¹ Applicant's unique citation designation number (optional) ² Applicant is to place a check mark here if English language Translation is attached